Housing First Social Impact Bond Feasibility Study

Is the Social Impact Bond model a suitable mechanism to fund a Housing First intervention that provides support services and rent supplements for homeless individuals with mental illness in Ontario?

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Executive Summary

This feasibility study suggests that a Social Impact Bond (SIB) could be used to fund a Housing First (HF) intervention that aims to improve the lives of homeless individuals with mental illness.

Homelessness is a major issue in Canada, affecting 200,000 people every year and costing $7 billion to the economy. The prevalence of mental illness within the homeless population is higher than in the general population: 50% of homeless individuals have some form of mental illness, compared to 20% of Canadians. Homelessness and mental illness are closely linked and around 120,000 Canadians are simultaneously affected by both conditions. If we include people who are vulnerably housed (unstable, poor quality housing, couch surfing) as many as 520,000 Canadians lack safe, affordable and supportive housing.[1]

Encouraging developments in addressing the homeless population have taken place in Canada over recent years. Nevertheless, many of the available responses to homelessness remain focused on emergency services and crisis management, which lack attention to preventative measures and breaking the negative cycle. HF is a model that has demonstrated positive housing stability outcomes by providing immediate access to housing coupled with wraparound support services.

The At Home/Chez Soi (AHCS) pilot is an evidenced-based HF intervention holding promise to significantly improve the lives of homeless individuals with mental illness. Backed by the largest randomized controlled trial for an HF intervention, the rich data and related research from the AHCS pilot has allowed us to confidently assess the costs and projected outcomes for the program.

AHCS data reveals that HF results in public sector cost offsets, specifically from a reduction in public sector usage across the shelter, health and justice systems. For members of the population who are high users of public services, HF results in substantial net cost savings.

Funding broader implementation of HF using a SIB would share the implementation risk associated with replication, scaling and modification from governments with investors, and would establish a rigorous performance measurement framework focused on outcomes. A SIB could also be structured to target outcomes that are associated with cost savings.

Public sector commissioners should consider two approaches for an HF SIB:

1. If the primary motivation for implementing an HF SIB is a desire to improve service delivery across a range of needs and to improve outcomes for homeless people, the SIB would not intentionally target high users. A SIB could raise upfront funds from social investors to work with a broad population of homeless individuals with mental health issues; public sector commissioners would pay an outcome tariff that is initially calculated based on the expected costs of delivering the service, but declines or increases with delivery performance. The payment mechanism would likely be based on housing stability outcomes with minimum service standards required to prevent adverse effects.

2. If the primary motivation for implementing an HF SIB is to reduce downstream costs, in addition to improving service delivery, then the SIB could be structured to target high users of public sector services. A SIB could raise upfront capital from social investors, funding service providers to work with high users; public sector commissioners' outcome payments would represent a portion (approximately 50%) of the achieved cost savings back to investors.[2] The payment mechanism would likely rely on usage outcomes that are a closer indicator of cost savings. Such an approach would require consideration of potential perverse incentives created by such an approach as well as assessing if targeting high users fits within government policy. For example, targeting high users could unintentionally incent homeless people to increase usage of public sector services to secure entry into the HF program.

Under both approaches, there is the possibility of attracting philanthropic sources of capital to offset investor requirements or improve the risk profile of the SIB. In addition, the feasibility analysis explores ways in which either rent supplements or support services could be funded separately, reducing the investment requirement and therefore the price that the government would pay for SIB outcomes. Different scenarios are described in this report.

Note on scope limitations:

This study is solely focused on the suitability of a SIB to fund support services and rent supplements for homeless individuals with mental illness. Although there are other social finance instruments that could be explored to fund such services, the scope of this analysis only includes the SIB model. One example of such other arrangements is the use of private funds to finance capital projects to increase social housing stock by having long-term government commitments to paying rent supplements.

Note regarding figures:

All figures in this report are illustrative and simplified for the purposes of this feasibility study. Inputs into financial modelling heavily rely on the experience of AHCS (see Appendix 5 for details on limitations). We realize that any individual HF SIB will require tailoring of the analysis to accommodate the uniqueness of each service provider program including program costs, historical performance records, ramp-up requirements, and other organizational considerations.

SECTION 1 – UNDERSTANDING HOMELESSNESS AND MENTAL HEALTH IN CANADA: A BRIEF OVERVIEW AND BACKGROUND

State of homelessness in Canada

Homeless people are among the most vulnerable and socially excluded populations in our society. Homelessness is not solely the deprivation of a physical space to live. Having a home provides roots, identity, emotional stability and a sense of belonging. When an individual is homeless, he or she experiences the loss of these elements, which leads to longer-term and entrenched consequences.

Homelessness is a major issue in Canada: in 2013, there were at least 200,000 Canadians who experienced homelessness and approximately 30,000 were homeless on a given night, the majority of whom used emergency shelters.[3]

There are different segments within the homeless population: unsheltered, living on the streets or in places not intended for human habitation; emergency sheltered, staying in overnight emergency shelters designed for people who are homeless; provisionally accommodated, staying in temporary accommodation, living in institutional contexts (for example, in hospital) and insecurely housed; at risk of homelessness, people who are not homeless, but whose current economic and/or housing situation is precarious.

A number of factors lead individuals to becoming homeless: structural factors in society resulting from declining income and lack of access to affordable housing; system failures in transition periods or inadequate support; and individual factors which encompass personal circumstances such as relationship breakdown, mental illness, substance misuse and many others.

Homelessness is expensive. Estimates indicate that homelessness costs the Canadian economy $7 billion per year.[4] Major drivers are the expenses associated with emergency shelters, social services, health care and criminal justice.

Much of the current homelessness support consists of remedial programs and emergency response services. This is not cost effective, and is not designed to break the cycle of homelessness. Remaining in a state of homelessness often leads to a decline in health and increasing involvement with the justice system. The resulting pressures on publicly funded services are costly.

The connection between homelessness and mental illness

Mental illness is prevalent within the homeless population. It is both a cause—which leads a person to becoming homeless—and a consequence, derived from the vulnerable situation faced by people living on the streets.

Mental illness increases the complexity and duration of homelessness, resulting in many individuals becoming chronically homeless. In Canada, 520,000 people living with mental illness are inadequately housed and among them, 120,000 are homeless.[5]

The prevalence of mental health problems among homeless people is significantly higher than in the general population. In Canada, more than 50% of the homeless population suffers from some form of mental illness, compared to 20% prevalence in the general population.[6] Estimates suggest that up to 67% of homeless people reported having a mental health issue in their lifetime.

For the homeless population, mental health issues are present at various levels, including: severe disorders, such as schizophrenia; other less severe conditions, such as mood and affective disorders; and concurrent mental health and substance abuse issues.

Even though mental illness represents 15% of the burden of disease in Canada, it receives less than 6% of health care dollars.[7] Almost a third of Canadians who seek mental health care report that their needs are unmet or partially unmet. One can assume that the situation is worse for homeless individuals with mental illness.

Mental illness costs Canada about $50 billion per year.[9] Health care, social services and income support represent the majority of these costs. It also costs businesses more than $6 billion per year in lost productivity (for example, through absenteeism and turnover). Over the next 30 years, the total cost to the economy will amount to more than $2.5 trillion.[9]

When concurrent, homelessness and mental illness lead to some of the most complex and entrenched cases of social exclusion in our society, representing a high cost to the individuals and society at large. These cases require an effective response that shifts toward prevention and adequate housing strategies.

SECTION 2 – IDENTIFYING A STRONG INTERVENTION MODEL: THE HOUSING FIRST APPROACH UNDER THE LENS

The Housing First approach to tackle homelessness

In Canada, many of the available support services for homeless people are focused on crisis management and emergency response, including shelters for short-term housing.

There is another approach, which has been tested successfully in Canada and other countries: Housing First (HF). This approach consists of immediate provision of permanent housing—at the earliest point of the intervention—which is complemented by ongoing long-term support services adapted to the specific needs of individuals. This is an evidence-based intervention model that demonstrates improved housing stability outcomes for homeless individuals with mental health illness.

The key principles behind this model include:

Figure 1: Overview of HF approach[10]

Housing First:
No requirement for readiness. Move from the streets, shelters, and ER rooms into permanent housing

Permanent housing

Transitional housing

Shelter Placement

Homeless

Treatment as usual:
Client must demonstrate readiness for each step
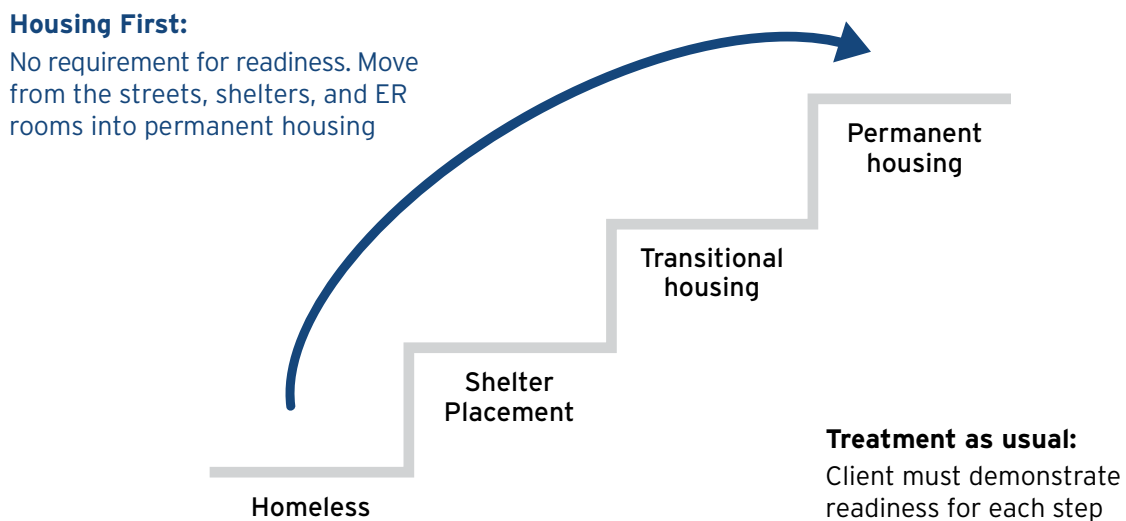
- **Absence of pre-requirements.** Participants do not need to meet any conditions related to substance use or compliance with treatment plans including medication to access housing.

- **Freedom of housing choice.** Participants are given a choice of where they would like to live—private rented sector, congregate housing or social housing—and generally agree to pay a maximum of up to 30% of their income.

- **Adoption of a client-centred approach.** The individual is at the core of the HF model and support services are adapted to meet his or her specific needs.

While the AHCS project represents one of the largest tests of HF as a service technology, some non-profit organizations have been operating similar programs in Canada for over 30 years. For example, in Toronto there are 31 supportive housing providers who operate over 5,000 supportive housing units in the city. Most are single accommodation (bachelor or one-bedroom apartments with portable supports). Since 1999 when the Ontario Ministry of Health and Long-Term Care introduced rent supplements for people living with mental illness, there has been an increase in the number of scattered apartments with flexible supports, in some ways similar to the AHCS model.[11]

However, the Mental Health Commission of Canada study Turning the Key (2010) noted that only 25,000 supportive housing units were available across the country and many of them were custodial in nature. There is a growing demand for more supportive housing based on choice and with flexible supports. The wait list in Toronto, for example, has grown from 700 in 2009 to over 8,000 currently. While there is a funding shift toward HF in Ontario, and a number of programs are adopting HF principles, the services that most closely reflect the AHCS program (and the HF approach described in this SIB study) are the three AHCS service teams in Toronto that received ongoing funding.[12]

A Housing First approach in Canada: The federal AHCS pilot project

In 2008, the federal government provided the Mental Health Commission of Canada with $110 million for a four-year research demonstration project aimed at generating knowledge about effective approaches for helping people experiencing serious mental illness and homelessness across five cities in Canada (Vancouver, Winnipeg, Toronto, Montreal and Moncton).

The AHCS project was designed to help identify what works, at what cost, for whom, and in which environments. It compared HF with existing approaches in each city. The project examined quality of life, community functioning, recovery, employment and related outcomes, under two types of support services for individuals with high needs (Assertive Community Treatment) and moderate needs (Intensive Case Management).

A randomized trial design was used in the project because it allowed for evaluation of the effects of HF in groups that were similar except for the intervention itself, thus giving the strongest evidence for future policy. More than 2,000 eligible participants were first grouped into high needs and moderate needs categories, based on mental health and service use history, and then randomized into the applicable ACT or ICM HF intervention group or the associated treatment as usual (TAU) group.

Assertive Community Treatment (ACT)

The ACT services are provided by multi-disciplinary teams that include a psychiatrist, nurse and peer specialist among others. The ACT teams are generally composed of a staff-to-participant ratio of 1:10. The ACT teams meet daily, and staff members are available to clients seven days per week with crisis coverage around the clock.

Intensive Case Management (ICM)

The ICM services are provided by teams of case managers who work with individuals and broker health and other related services as needed. The staff-to-participant ratio is generally 1:16. ICM teams hold case conferences at least monthly and services are provided seven days a week, 12 hours per day.

The intervention model tested in AHCS consisted of the following characteristics:

Figure 2: HF intervention model and potential outcome[13]

OUTREACH ACTIVITIES	IMMEDIATE ACTIVITIES	0-6 MONTHS OUTCOMES	6-12 MONTHS OUTCOMES	12-24 MONTHS OUTCOMES
Identify and recruit eligible individuals	Access to public benefits (income and treatment services)	Improve participation in mental health and addictions treatment services	Improve wellbeing and quality of life	Improved housing stability
ICM ACT	Cooperation between caseworker and individual	Reduction in contact with non-supportive networks	Reduced Substance misuse	Reduced usage of emergency services Reduced involvement with justice system Reduced inpatient nights in hospital
Rent supplements	Access community health services		Improve illness management and self-care	Improved quality of life and community functioning Improved physical health
	Assess family and social support		Improved community integration	

- **Eligibility criteria.** An individual must have legal adult status, be absolutely homeless (or precariously housed with recent previous episodes of absolute homelessness) and demonstrate the presence of a serious mental disorder with or without a co-existing substance use disorder.

- **Type of support service provided.** Individuals enroll in support services according to their level of need (see Appendix 3 for population definitions).

  · High needs individuals enroll in Assertive Community Treatment (ACT).

  · Moderate needs individuals enroll in Intensive Case Management (ICM).

Immediate support is provided in areas believed to be critical in the recovery process: applying for financial support; coordinating between service providers and participants around treatment goals; accessing adequate health support; and establishing family and social links.

Initial support (six months) is expected to improve the access of clients to addictions and mental health treatment and reduce their contacts with non-supportive social contacts.

Interim impact (12 months) should reflect an improved sense of well-being and quality of life; participants are expected to increase their participation in mental health treatment and reduce their substance misuse; individuals work with the caseworker on building stronger links with family and friends.

Overall recovery is believed to be associated with the maintenance of stable housing, reduced use of emergency response services or use of the emergency room for primary care, reduced number of arrests, reduced number of hospitalizations and a general increase in physical health and quality of life.

Quantifying the impact of the intervention model

Performance data from the AHCS pilot project revealed the following main findings relevant to our study:

Housing stability. HF was more effective than the existing array of programs accessed by treatment as usual (TAU) participants for finding housing and staying housed. Housing stability over 24 months was measured in two ways:

1. In the last six months of the 24-month intervention period, AHCS tracked the number of clients who were stably housed:

   · 62% of HF participants were housed all of the time, 22% some of the time, and 16% none of the time.

   · 31% of TAU participants were housed all of the time, 23% some of the time, and 46% none of the time.

2. Over the duration of the 24-month intervention period, housing outcomes were also measured according to the average percentage of days spent in housing for each three-month period of follow-up:

   · Participants in HF spent an average of 73% of their days in housing.

   · TAU participants spent an average of 32% of their days in housing.

As this data shows, stronger outcomes resulted by using an HF approach. Since the study used a randomized design in which all factors, other than the intervention, that could result in stable housing were designed to be equivalent between groups, these stronger outcomes can be reasonably attributed to the intervention.

Public sector usage. Housing stability allows for a shift from institutional-based and emergency care to more adequate planned visits and regular follow-up with community-based services. The AHCS study reported on public sector usage across a number of indicators related to the health and justice sectors.

It also reported on the number of events for each public sector usage category at 12 and 24 months for HF and TAU groups, both for high and moderate needs individuals, and for high users (see Appendix 4 for details).

According to AHCS, every $10 invested resulted in average offsets of $9.60 for the high needs participants, $3.42 for the moderate needs participants and $21.72 for the high users group. HF delivers net cost savings when targeting the highest users of public sector services ($11.72 in net savings per $10 invested).

High users

High users (distinct from high needs clients) are defined as those who fell in the top 10% or service usage prior to intervention as measured over a three-to six-month period. High users are distributed across the high needs and moderate needs groups—61% were high needs, 39% were moderate needs. On average, a high user does not necessarily require substantially higher service delivery costs.

Data limitations and long-term impact of the intervention

In our analysis, we adopted the AHCS public sector savings estimates. However, we do realize that cost savings captured in the AHCS estimates are limited to savings from reduced public sector service usage only during the intervention period. The AHCS savings estimates exclude long-term benefits of the HF intervention, such as employment, which could be significant when assessing the value for money of such an intervention, from a government or public perspective.

SECTION 3 – A METHODOLOGY TO DETERMINE WHETHER A SIB IS A SUITABLE TOOL FOR FUNDING A HOUSING FIRST INTERVENTION

The AHCS pilot demonstrated that the HF model results in improved social outcomes and can be implemented in a cost-effective manner.

To provide HF interventions on an ongoing basis, in communities across Canada, significant investment is required. A SIB could play an important role in financing and scaling HF. A SIB would allow government to share the implementation risk associated with replication and scaling with investors, and would establish a rigorous performance measurement framework focused on outcomes rather than outputs, such as the number of people served, as is typical under many funding agreements currently.

How would a Social Impact Bond be applied to Housing First?

In general, a SIB is a contract in which a commissioner (government or other payor) commits to pay for improved social outcomes. On the basis of this contract, investment is raised from socially motivated investors. This investment is used to provide upfront capital to social service providers, to implement a particular intervention. If social outcomes improve as a result, investors will receive payments from the commissioner. These payments repay the initial investment plus a financial return. The financial return typically depends on the degree to which outcomes improve.[14] Outcomes are evaluated and/or validated by an independent evaluator. Please refer to Appendix 1 for more on SIBs.

Figure 3: Illustrative SIB structure for HF
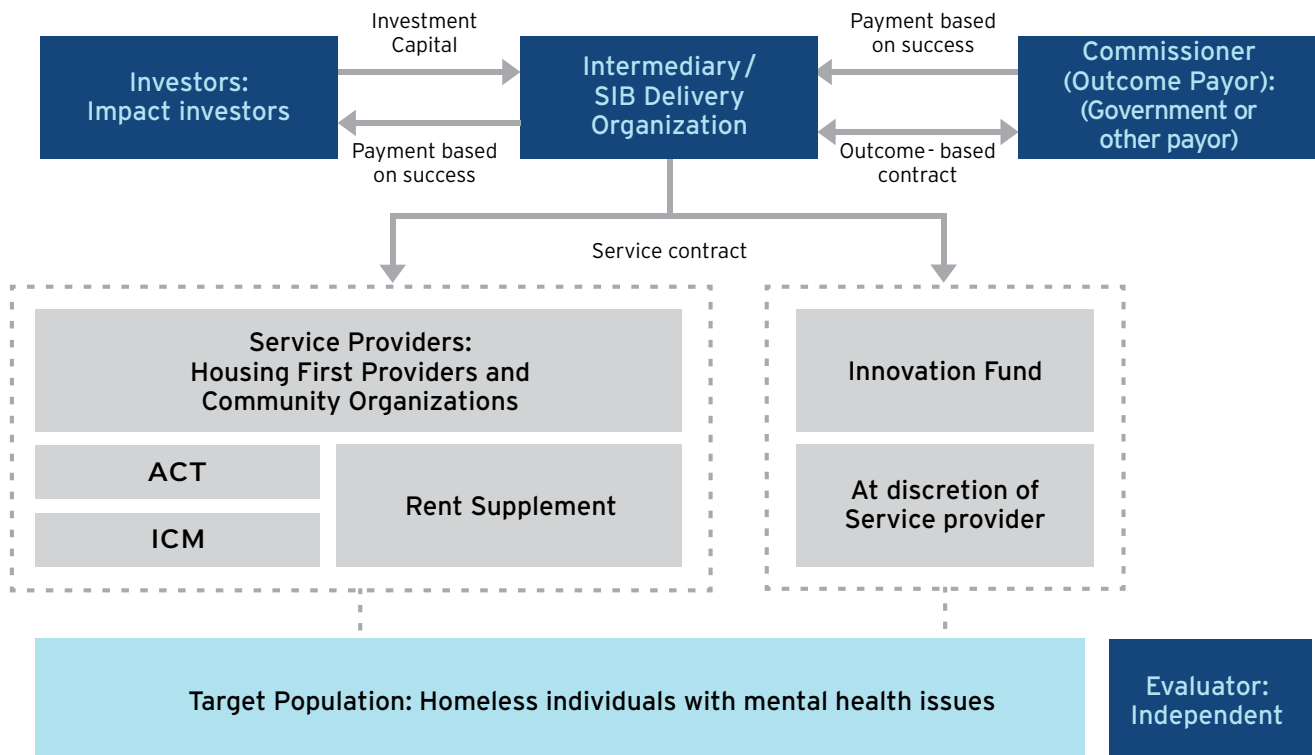
The structuring of a SIB model requires a number of features to be present, many of which are expressed in the HF intervention:

A defined target population. In the HF intervention, participants are homeless individuals with mental illness who are currently achieving poor housing outcomes; they are selected on the basis of clear eligibility criteria through needs assessment, referral pathway and recruitment procedures.

A strong intervention model. HF, through the AHCS pilot, has a demonstrated track record in achieving positive housing and related outcomes for the target population.

Ability to scale with service providers with track record of success. Alternative approaches to service provision can be contemplated:

- By contracting with existing service providers: This approach would utilize or expand the capacity of existing service provider organizations that are already delivering interventions similar to HF. Ontario is rich with service providers who can confidently deliver the HF intervention, although training needs must be recognized to bring service delivery to the same standard and within the same HF workframe.

- By creating new service delivery and housing teams: This approach would be modelled on AHCS where new teams were created–a housing team to manage rent supplements and assist clients in finding housing, and a service team to deliver ICM or ACT.

Quantifiable outcomes and an effective measurement framework. HF can track housing outcomes (housing stability) and public sector service usage outcomes (for example, hospital visits or time spent in jail/prison). Research has demonstrated direct attribution of outcomes to HF.

Quantifiable economic benefit. HF results in cost offsets due to reduced public service usage across the participating population.

It is important to clarify that under a typical SIB structure, outcome payments are made to pay back investors who assume the financial risk of the program. The service provider receives funds upfront from the investors and is typically not exposed to the financial risk of the outcome payments.[15]

Note on rent supplements and shelter: Clients in HF may utilize social housing (typically operated by a service provider) or private housing stock. The AHCS project relied on the private market where a housing team was able to assist clients in finding housing where they can use their rent supplement to pay the private landlord. However, rent supplements used in the private market may not be an adequate solution. In some regions in Canada, housing vacancy rates are very low resulting in fewer units available for the HF target population. In addition, some service providers express a general sense of lack of affordable and appropriate housing stock. For the purposes of this study, our analysis is flexible as it holds true whether clients are housed in the private market or in social housing.

Increasing the social housing stock: In this context it is also worth observing that, where there is long term government commitment to rent supplements, an alternative or supplemental approach may be for that future revenue stream to be used to support other funding models to address the shortage of suitable accommodation, enabling service providers to finance a new social housing building or expand an existing one.

Modelling of a Housing First Social Impact Bond

We considered five main inputs to create a SIB model for an HF intervention:

1. **Intervention scope:** The target population and cohort size; segmentation of needs and associated services.
2. **Intervention costs:** Fixed and variable costs; flexible funding to support services.

3. **Public sector value:** Costs under status quo versus under the intervention.
4. **Payment mechanism:** Outcome metrics and pricing.
5. **Investment structure:** Cash flows; contribution schedule; outcome payments; capital reserve.

These inputs formed the basis for a sensitivity analysis and business case development. Several scenarios are put forward for consideration.

Intervention scope

Target Population. The target population—homeless individuals with mental illness—can be segmented by moderate needs, high needs, and high users. High users are those in the top 10% of public service usage and comprise both high needs and moderate needs individuals. By changing the population composition one can observe the impact on intervention costs and government cost savings. Referral sources to identify individuals include community mental health organizations, other community organizations, hospitals, the criminal justice system, professionals (psychiatrists and mental health workers), self, family or friend, or general outreach. Please refer to Appendix 3 for details on the intake algorithm.

Cohort delivery model. Homeless individuals with mental health issues often need long-term support, which may last for several years. However, a SIB typically funds and measures an intervention's outcomes for a limited time period. To address the challenge of discontinuing supports for those who require them, we have devised a scenario that uses a flexible cohort system. Under this scenario, three independent cohorts run for 24 months with a constant caseload (for example, 250 individuals). This allows service providers to plan for a constant caseload over the six-year SIB. Additionally, there would be the option for clients in cohort 1 or cohort 2 to transition into another 24 months of service should their situation at the end of the first 24 months be justified. For example, a caseload of 250 individuals would result in a SIB that addresses a maximum of 750 clients over the six-year period. Beyond the six-year term of the SIB, a decision on ongoing funding would be required, and could be based on the success of the intervention.

Practical considerations dictate a ramp-up period to reach the maximum caseload. The ramp-up period is required because the intake process is staff-intensive as clients are brought into the intervention and their specific needs understood and catered for. For simplicity our modelling did not take into consideration the ramp-up period, and this would be a required detail in future HF SIB development projects.

Intervention costs

There is a link between the decisions that are made with regard to the intervention scope and its costs. For example, high needs clients requiring ACT demand more staffing and therefore increased cost. Understanding trade-offs in light of the intended objectives of a potential commissioner is fundamental for the HF SIB business case.

The cost structure we employed in our modelling was informed by the AHCS pilot and checked against other sources. Table 1 summarizes the base costs per person, per year. Please refer to Appendix 2 for more cost information.

Table 1: Summary of annual costs per individual according to type of participants

Population	Cost per person per year*
High Needs (ACT)	$22,257
Moderate Needs (ICM)	$14,177
High Users (Top decile)	$19,582

* Figures include salaries of all front-line staff, supervisors, rent supplements, and additional expenses.

The cost of a high needs client is higher primarily because the staff-to-client ratio is 1:10, which is more resource-intensive than for ICM clients, for whom the ratio is 1:16.

For the high users group, the annual cost per individual falls in between that of the high needs and moderate needs groups. This is because the high users are distributed across the high needs and moderate needs groups—61% were high needs, 39% were moderate needs.[16]

Note on scalability: While our illustrative modeling has been informed by an assumed caseload of 250 individuals per annum, HF cost structure is substantially variable (tied to caseload):

- Rent supplements are directly tied to the caseload and there are no scale economies.

- Support service costs are largely staff-related. Since HF support services are design around a staff-to-client ratio, caseload directly drives support service cost.

- Fixed costs are limited

Public sector value

Public procurement can achieve value for money without necessarily focusing on cost savings:

- Outcomes-based contracts offer an opportunity to achieve value for money by sharing implementation risk with third parties

- SIBs introduces governance rigour commensurate with that of the private sector. Many SIBs are managed through an intermediary or advisory body whose purpose is to manage performance by collaborating with service providers and facilitate course corrections.

- SIBs are typically designed to encourage innovation in service delivery as service providers are focused on achieving desired outcomes rather than meeting rigid process requirements.

In addition to the above, cost savings to government can be achieved in some cases. For an HF SIB, we calculate cost savings to government as the difference between the current public sector expenditures on the target population—reflected in the TAU group—and the expenditures under the HF intervention.

The evidence base of AHCS clearly demonstrates that there is a general reduction in the public service usage of the HF intervention group when compared to the TAU group. For the high and moderate needs groups, government cost savings partially offset the intervention costs. For the high users group —those individuals who were heavy users of public services prior to the intervention—the public sector savings more than offset the program costs.

The savings figures depicted in the chart below also change depending on whether rent supplements are included or excluded from the SIB funding. For example, if existing rent supplement stock is used in a SIB, then incremental intervention costs would only need to cover the support services; under such a scenario, the economics are more compelling.

Payment mechanism

The payment mechanism describes the way in which payments for success are made. It is important to clarify that outcome payments are made to pay back investors who assume the financial risk of the program. The service provider receives funds upfront from the investors and is typically not exposed to the financial risk of the outcome payments.[17] An effective payment mechanism should provide the right incentives, achieve an

appropriate balance between capital efficiency (time lag to payment) and implementation by the service provider and minimize public sector payment for deadweight (people who would have achieved positive housing outcomes anyway) when possible.

Figure 4: Annual intervention costs and potential cost savings (per client per year)
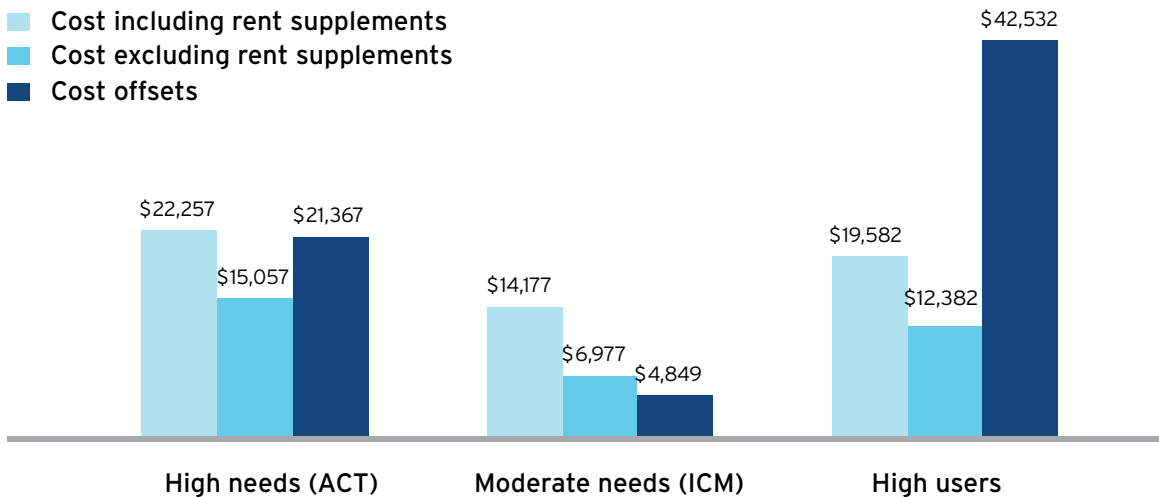
Four payment mechanisms have been explored and will shape the conclusions of this study. Method 1 and 2 are centered around the same social outcome – housing stability – but each has its unique focus. Method 1 relies on the performance of the entire cohort during the entire intervention, while Method 2 relies on the individual client performance in the last six months of the 24-month intervention period.

Method 1: Housing stability cohort-based payment mechanism

Housing stability has been considered as an outcome metric due to its indication of the success of the intervention (from a social outcome perspective) and relative ease of measurement and verification. This specific, cohort-based method is based on the average percentage of days that individuals in the AHCS HF intervention spent housed: 73% was modelled as the expected performance triggering a base case outcome payment and return to investors. If performance is below 73%, a lower payment is made, and if performance exceeds 73%, a higher payment is made. This takes into consideration historical success rates (that is, the 73% AHCS performance). For example, for a cohort of 250 we would expect that the cohort as a whole would spend an average of 73% of their time stably housed. The price paid for this performance is calculated to cover investment required for the entire cohort. There is a sliding scale effect in the sense that if clients are stably housed for a lower percentage of time (for example, 60%), fewer payments are triggered, and therefore a smaller amount is paid back to investors.

The per-unit pricing of the outcome under this option was informed by the historical cost that was needed to achieve the outcome. However, the payment mechanism is not a simple cost reimbursement back to investors; once the price per unit is determined (dollars for each percentage point increase in days stably housed), investors are paid back only for those percentage points achieved by the service provider. Payments for cohort 1 are made in year 3, payments for cohort 2 are made in year 5, and payments for the final cohort are made in year 7.

Table 2: Outcome price calculation for method 1 – cohort-based

Calculation of Outcome Price: Method 1: cohort based		
Outcome metric		% of days housed over 2 years HF
AH/CS performance	A	73%
Cohort size (example)	B	250
2-year intervention cost-ICM		$28,354
2-year intervention cost-ACT		$44,514
2-year weighted average intervention cost	**C(AHCS sampling)**	**$35,502**
Intervention cost per percentage point of housing stability	D=C/A	$486
Calculated outcome price ($ per percentage point of housing stability per person) after minimum threshold is met[18]	**E(Using 8% IRR)[19]**	**$574**
Total outcome payment for cohort per percentage point	F=E*B	$143,750
Expected total outcome payment for cohort	G=F*A	$10,493,750

Method 2: Housing stability individual achievement payment mechanism

This method is based on the percentage of individuals in the AHCS HF intervention who spent all of their time housed in the last six months of the study: 62% would be modelled as the expected performance generating a base case outcome payment and return to investors. An achievement payment is made for each client who spends the last six months in the 24-month intervention in stable housing. The amount of this payment per individual takes into consideration historical success rates (that is, the 62% AHCS performance). For example, for a cohort of 250 we would expect that 155 clients would trigger an individual achievement payment. The price paid for the 155 clients is calculated in such a way that it covers investment required for the entire cohort. There is a sliding scale effect in the sense that if fewer clients are stably housed, fewer payments are triggered, and therefore a smaller amount is paid back to investors.

Table 3: Outcome price calculation for method 2 – individual achievement

Calculation of Outcome Price: Method 2: individual achievement		
Outcome metric	A	% of days stably housed in last 6 months
AH/CS performance	B	62%
Cohort size (example)	C	250
# of people stably housed in cohort	D=B*C	155
2-year intervention cost-ICM		$28,354
2-year intervention cost-ACT		$44,514
2-year weighted average intervention cost	**E**	**$35,502**
Intervention cost per person stably housed	D=E/B	$486
Calculated outcome price ($ per person stably housed) after a minimum threshold is met	**F(Using 8% IRR)[20]**	**$67,500**

Method 3: Blended housing stability individual and cohort-based payment mechanism

This payment mechanism blends payment methods 1 and 2 and essentially uses a weighting—between the individual and cohort-based mechanism—to define the outcome pricing. The objective of this payment mechanism is to provide incentives to service providers to work with everyone (cohort-based) but also to focus on the specific needs of each individual (individual achievement).

Service standards: preventing adverse effects (applies to methods 1, 2 and 3)

Focusing solely on housing stability as an outcome metric may result in adverse effects such as focusing on housing at the expense of recovery. This would need to be addressed in SIB design. For example, in addition to the housing outcome metrics that would trigger success payments, it would be appropriate to introduce other metrics that would define a minimum standard to be met before the payment mechanism is engaged. For example, a minimum community integration, quality of life, or recovery metric (using indices employed in AHCS or other settings) can be enforced. Such metrics would ensure that service delivery is balanced to focus on housing stability and also on other and potentially longer-term impacts on the clients. Another consideration is fidelity to the HF approach: the AHCS team found that higher fidelity is associated with better housing outcomes and better quality of life and therefore could be considered as a minimum required program standard.

Method 4: Usage-based payment mechanism

This payment mechanism is likely more appropriate for a cost-savings motivated SIB. Under this option, the outcome payment is based on achievement of public sector usage reductions, which are a closer indicator of public sector cost savings than housing stability metrics. The outcome metrics under such a scenario would be all or a subset of those listed in Appendix 4. We have modelled payments 12 months post-intervention after the end of each cohort. Using 24-month cohorts, this would mean payments in years 3, 5 and 7. For example, for a caseload of 250, according to the AHCS baseline performance, the government would expect savings of approximately $64 million; investors would be paid back $34.5 million or 54% of the expected savings.

Figure 5: Usage-based payment mechanism (Method 4)
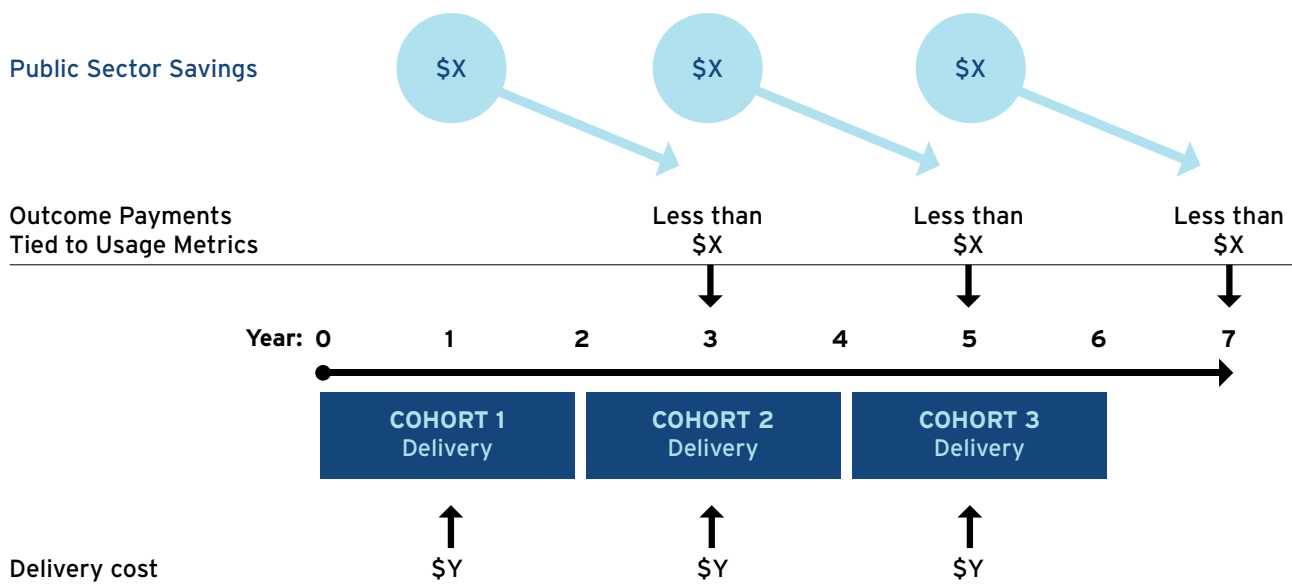
Raising private investment to fund service delivery in the HF intervention offers a number of benefits that include flexibility in service provision as well as length of funding commitment. The chart below uses illustrative figures to demonstrate how the HF SIB investment structure works.

Important elements of structuring include:

Timing of investor capital commitment. Investment would be drawn from investors to provide capital for service delivery in each year.

Working capital contingency. The model includes a small working capital contingency worth three months of service delivery. This works as a buffer of capital and is expected to be returned at the end of the SIB term.

Flexible capital pool. The HF SIB model includes a flexible pool of capital used for service delivery. These funds, often earmarked as "Innovation Funds," can be used during the SIB period to fund specialist provisions that meet specific needs of participants which are not part of the original normal service agreements. The Innovation Fund should be able to test innovative services that are informed by ongoing learnings from service delivery. In our modelling, we've included an Innovation Fund of $200,000 consumed in the early years of the SIB term.

Repayment. There are a maximum of three outcome payment periods. Twelve months after the end of each cohort, investors are entitled to receive outcome payments if the cohort achieves the minimum level of pre-established performance.

SECTION 4 – SIB BUSINESS CASE, SCENARIOS AND CONCLUDING REMARKS

A SIB could be used to fund an HF intervention that aims to improve the lives of homeless individuals with mental illness in Canada. From a government perspective, a SIB would transfer implementation risk away from government and incentivize improved, outcomes-focused performance.

Various implementation scenarios are possible. For example:

- Federal, provincial or municipal governments could fund an HF intervention through a SIB, or multiple levels of government could partner to do so, on the basis of a cost-sharing agreement.

- A SIB could be used to fund an HF intervention in one or multiple communities, across Canada, taking into account factors such as need, target population size, service provider ecosystem and funding constraints.

- The intervention could be delivered by one service provider, or by a consortium of service providers, which would collaborate on program delivery and outcomes achievement—potentially with the support of an intermediary.

- The intervention could be modified to meet specific local needs.

- By focusing on outcomes rather than interim outputs, a SIB also provides service providers with flexibility to adapt in the context of the intervention, to better meet the needs of particular individuals and react to new information.

These are only a few of the possible permutations that a SIB would allow for. In all cases, a SIB would align government, service provider and investor incentives to target and rigorously measure specified outcomes. Based on the economics and potential impacts, commissioners could be motivated to design a SIB under two philosophies:

Figure 6: Illustrative HF SIB investment structure
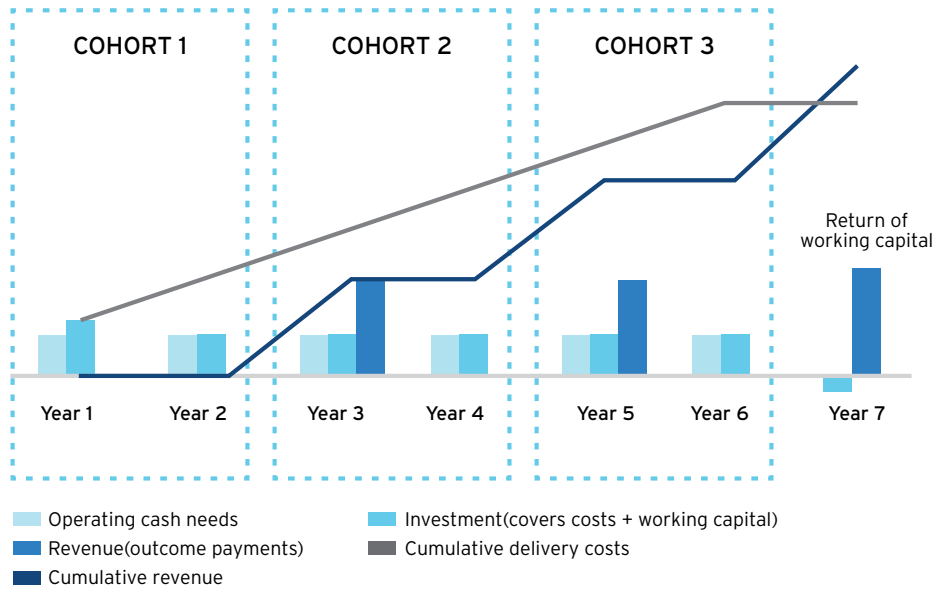
Improve service delivery: If the motivation for implementing an HF approach is driven primarily by a desire to improve service delivery by paying for outcomes, then a SIB could be structured to improve outcomes across a range of needs and user profiles.

Cost savings: If the primary motivation for implementing an HF approach is a cost-savings agenda, then a SIB could be structured to maximize cost savings or cost avoidance by targeting high users. Such an approach would require consideration of potential perverse incentive created by such an approach as well as assessing if targeting high users fits within government policy.

There is flexibility in implementing an HF SIB.

HF SIB potential scenarios

- **Inclusion of support services and rent supplements in the investment requirement.** Under this assumption, the SIB would entirely fund the intervention, which would require a larger investment from investors.

- **Exclusion of rent supplements from the SIB-funded service.** Under this assumption, rent supplements would be covered directly by government either through existing or new rent supplement funding, or through philanthropic sources or grants. This model would be suitable for a SIB as it links the success of provision of support services to investor return. For the commissioning governments, it would result in a lower funding requirement for SIB outcomes payments.

- **Population composition.** The impact of a SIB varies according to the assumption made about the population composition between moderate needs, high needs, and high users. We've focused particularly on two population scenarios: 1) a composition consistent with AHCS (roughly equal numbers of high needs and moderate needs); and 2) 100% targeting of high users. Other samples could be analyzed such as 100% targeting of high needs where savings almost offset program costs.

- **Caseload (program size).** The HF SIB can be implemented within a broad caseload range. However, a minimum caseload would be required to justify a full service team, and a maximum caseload is likely driven

by service provider capacity in a specific region as well as the current stage of the SIB market development. SIBs globally have ranged in size with the US seeing increasingly larger programs (over $20 million), while the only SIB in Canada is $1 million in size. We believe it is reasonable to assume that an HF SIB in the near future in Canada can include a caseload of 100 to 300 individuals and based our analysis on a 250-person caseload.

The following variations were considered to build a SIB-funded HF intervention:

Figure 7: Summary of two different SIB design approaches

COMMISIONER MOTIVATION	INNOVATION IN SERVICE DELIVERY	COST SAVINGS
POPULATION TARGETING	COMPOSITION OF HIGH AND MODERATE NEEDS AS APPROPRITATE FOR THE SITUATION	TARGET HIGH USERS
PAYMENT MECHANISM	COST- INFORMED BASE CASE	LINKED TO NET SAVINGS
OUTCOME EVIDENCE	HOUSING STABILITY — Single outcome metric, simple mesurement framework **Which leads to:** REDUCED HEALTH SECTOR USAGE / REDUCED JUSTICE SECTOR USAGE	SHELTER STAYS / HEALTH SECTOR USAGE / JUSTICE SECTOR USAGE — Multiple outcome metrics, complex mesurement framework

A. Scenarios for a SIB motivated by service innovation and improvement, assuming a target population of up to 750 individuals, across three cohorts of 250 participants each:

	SCENARIO A.1 Support services: **YES** Rent supplements: **YES**	**SCENARIO A.2** Support services: **YES** Rent supplements: **NO**
A. Innovation in service delivery	**AHCS sampling** Cohort outcome price (50%): C$ 575 Individual outcome price (50%): C$ 67,500 Investment commitment: C$ 28.6M Investor IRR: 8.0%	**AHCS sampling** Cohort outcome price (50%): C$ 348 Individual outcome price (50%): C$ 41,000 Investment commitment: C$ 20.3M Investor IRR: 8.0%

A SIB that is driven primarily by improvement and innovation in service delivery would not necessarily target high users in population group. We've modelled a mix based on the AHCS experience that included a near-even mix of high needs and moderate needs clients.

The payment mechanism adopted for these scenarios is the hybrid individual and cohort-based mechanism (method 3 as explained in Section 3) providing a balanced incentive structure. Under these scenarios, the unit price for outcomes decreases as rent supplements or support services are assumed by a third party and are excluded from the SIB-funded program. For more information on the hybrid payment mechanism and the calculation of the outcome price, please refer to Section 3.

B. Scenarios for a SIB motivated by cost savings assuming a target population of up to 750 high users, across three cohorts of 250 participants each:

	SCENARIO B.1 Support services: YES Rent supplements: YES	SCENARIO B.2 Support services: YES Rent supplements: NO
B. Cost saving	Targeting of high users: 100% Tariff % of commissioner savings: 54% Investment commitment: C$ 31.3M Investor IRR: 8.0%	Targeting of high users: 100% Tariff % of commissioner savings: 40% Investment commitment: C$20.1M Investor IRR: 8.0%

A SIB that is driven primarily by cost savings would target high users of public services (shelter, health and justice). The cost savings SIB scenarios would likely rely on a payment mechanism similar to method 4 (as explained in Section 3). Under these scenarios, the percentage of commissioner savings used to pay investors decreases according to the level of investment required.

Investor return sensitivity analysis

To test the robustness of the concept modelling and understand the impact of under- and over-performance against the baseline, a number of Internal Rate of Return (IRR) sensitivities analyses were performed.[21]

The modelled baseline performance reflects the AHCS experience. However, the SIB can make payments to investors even if that baseline is not achieved or if it is surpassed, on a sliding scale. To avoid paying for performance below an accepted level of service standard, a minimum performance threshold can be defined (for example, minimum 60% housing stability to trigger any investor payback). Finally, a cap can also be enforced on investor return in the case of over-performance. Some international SIB precedents have included a return cap of approximately 10% to 15%.

Table 4: IRR sensitivity to performance against AHCS baseline (Scenario A.1)

			% of days stably housed over 24 month period (Cohort Based)				
			65	70	73	75	80
No. Client housed all the time in last 6 months (Individual Achievement)		140	1.6 %	3.7 %	5.0 %	5.9 %	8.0 %
		150	3.6 %	5.8 %	7.0 %	7.9 %	10.0 %
		155	4.6 %	6.8 %	**8.0 %**	8.9 %	10.9 %
		160	5.6 %	7.8 %	9.0 %	9.8 %	11.9 %
		170	7.6 %	9.7 %	11.0%	11.8%	13.8 %

Concluding remarks

Homelessness and mental illness concurrently affect approximately 120,000 Canadians each year. This situation continues to impose a high cost on the individuals, society and government at all levels. New solutions are needed to raise the amount of capital required to address this challenge, and to deliver improved social and economic outcomes for the individuals and communities involved.

HF is an evidence-based intervention model that shows improvement in housing stability and community functioning outcomes for homeless individuals with mental illness. This intervention has been rigorously tested in Canada with the AHCS study.

Governments across Canada could benefit from using Social Impact Bonds to share the implementation risk of replicating, scaling or adapting the HF intervention with investors. Additionally, a SIB could increase the likelihood of delivering positive outcomes by enabling innovation and flexibility in service delivery and introducing discipline and enhancing rigour.

The implementation of a SIB to fund an HF intervention in Canada would deliver positive outcomes for homeless individuals with mental illness while presenting a viable business case to social investors and a strong value for money proposition to governments. We make the following recommendations:

Governments at all levels (federal, provincial and municipal) should consider the HF intervention as a suitable intervention model for existing or future SIB procurement processes. Launching an HF SIB could be done by allocating funding to pay for housing and related outcomes, and soliciting bids from service providers and impact investors to execute the HF intervention–either directly or using an intermediary organization. By doing this, governments would shift public sector funding toward purchasing housing and related outcomes, rather than funding service provision independent of performance. This report aims to inform government funding decisions by illustrating outcome pricing, performance thresholds and appropriate risk transfer.

Investors should consider the HF model as fertile ground for a SIB that would offer a means to mobilize their capital for public good. Upfront capital is crucial to allow social service providers to run their activities during the SIB period. For investors, this should be seen as a viable opportunity to invest in their communities, while maintaining the possibility of getting a return on their investment

Social service providers have the opportunity to undertake an assessment of their HF interventions in order to marry investor and government motivations. This report can be used by providers of HF interventions as a resource for making a robust SIB business case to governments and investors, improving their ability to attract new sources of capital for their activities.

Finally, this feasibility analysis offers transferable approaches and elements that could be applied in future SIB studies and SIB development processes across Canada.

APPENDIX 1 – BACKGROUND ON SIBs

This section is based on the Social Impact Bond Technical Guide for Service Providers, published by MaRS Centre for Impact Investing in November 2013. The full version of the report is available at http://www.marsdd.com/mars-library/social-impact-bond-technical-guide-for-service-providers/. More resources are available through Social Finance UK at http://www.socialfinance.org.uk/news-views/publications/

Social Impact Bonds are outcome-based contracts that represent a shift in the public and social sectors toward evidence-based policy and funding for outcomes, rather than program activities or outputs. Understanding this environment, demonstrating evidence and measuring outcomes are becoming increasingly relevant for social service providers seeking to attract funding for their programs. The table below describes the main differences between service-based commissioning and outcome-based commissioning.

Service-based commissioning	Outcome-based commissioning
Government contact pays upfront for the service whether it generates outcomes or not. Funding is independent of the outcomes achieved by the service.	Incentivizes service provides to innovate in the pursuit of target outcomes, rather than deliver defined activities and outputs. The service is shaped around the achievement of intended outcomes.
If government pays for a service it tends to specify the service and be prescriptive about it. As a result, services tend to be fixed, not adapting to new knowledge or changing needs of beneficiaries.	Working against outcomes fosters focus on the service users and adaptation of service delivery to their specific needs throughout the length of service delivery.
Performance management is static and implemented to collect outputs that do not inform commissioning decisions and operational decision-making.	Regular reporting cycles drive data collection around service delivery and inform operational decision-making. Figuring out what works really matters.

The SIB model is a pay-for-performance contract in which a government agrees to pay for improved social outcomes delivered by an intervention that tackles root causes (rather than providing remedial treatment) with the potential to generate downstream savings for government. To fund the service providers delivering the prevention-based intervention, investment is raised from private investors.

If the intervention is successful and achieves the contracted social outcomes, the government will provide a return to investors from a portion of the projected cost savings realized from improved social outcomes. In other words, the investors provide the upfront capital to scale up the intervention, and receive a financial return if—and only if—the specified positive social outcomes are achieved as a result of the intervention.

A SIB is a partnership model involving five principal actors:

- **The service provider(s):** Delivers social intervention to a specified target population.

- **The investor(s):** Provides upfront capital to fund the program delivery and bears some or all financial risk.

- **The government or commissioner:** Provides payments to investors if agreed outcomes are met. These payments repay the principal plus a financial return that depends on the degree to which outcomes improve.

- **The SIB delivery organization (intermediary):** The counter body to the outcomes contract with government. While the SIB delivery organization role can be assumed by various parties (for example, an intermediary, a special purpose vehicle or the main service provider), the role of the SIB delivery organization includes brokering relationships between key stakeholders, sourcing capital, leading deal construction and managing ongoing performance of the SIB program. In some cases, the SIB delivery organization may identify and select service providers.

- **Third-party evaluator:** Conducts independent evaluations of the achievement of outcomes.

The table below describes the key elements for a successful SIB.

Criteria for a Successful SIB	Key considerations
1. Pressing problem and gap in current provision	A Social Impact Bond (SIB) is intended to bring new funding to meet a gap in service provision or to foster innovation within current service provision where there is margin to improve beneficiaries' outcomes.
2. Promising interventions	A Social Impact Bond works best for extending promising approaches that are backed by some evidence, not pure innovation which has not been tasted before.
3. Risk transfer, external expertise and more flexible resources.	A Social Impact Bond transfers risks of implementation failure away from the public sector and can enable more flexible models of service provision that adapt to individual specific needs.
4. Supports and catalyzed wider service changes	A Social Impact Bond aims to continually improve delivery through rigorous monitoring, evolving service provision and stimulating new forms of collaboration between complementary service providers.
5. Outcomes-based contract possible:	
a. Robust outcome metrics with clear attribution	A Social Impact Bond relies on a robust outcome metric which can be easily measured and does not entrench any perverse incentives. There are a number of ways through which impact can be measured (for example, using a comparable group).
b. Identifiable target population	A target population must be identifiable and accessible. It should be focused in order to provide maximum impact and value for many.
c. Sufficient saving for investors and commissioners	A Social Impact Bond involves significant risk for investors and new ways of working for commissioners-each needs sufficient rewards and appropriate risk sharing is deemed fundamental for successful SIB implementation.
6. Social impact high and attractive to social investors	A Social Impact Bond will aim to attract investors who are interested in the social impact as well as a financial return.

APPENDIX 2 – KEY FINANCIAL MODEL INPUTS (SCENARIO A.1)[22]

INTERVENTION MODEL INPUTS	
Number of clients receiving support	750
Target population by needs	
High Needs (ACT)	44%
Moderate Needs (ICM)	56%
Target population by public sector usage	
High Users	0%
Normal Users	100%

COST INPUTS	
SUPPORT SERVICES & RENT SUPPLEMENTS	**Per client/per year**
Assertive Community Treatment	$22,257.00
Intensive Case Management	$14,177.00
High Users	$19,582.00
RENT SUPPLEMENTS ONLY	**Cost per person**
Monthly rent supplements	$600.00
Annual rent supplements	$7,200.00
INTERMEDIARY COSTS	**Per year**
Total annual intermediary and performance management costs	$86,500.00

HOUSING STABILITY OUTCOMES	
Housed for 24 months	62%
Housed for 12 months	22%
Housed for 0 months	16%
% of days stably housed over 2 years HF	73%

COST SAVINGS	Per $ Per person over 2-year
High Needs (ACT)	$0.96
Moderate Needs (ICM)	$0.34
High Users	$2.17

FINANCIAL INPUTS	
Working capital contingency (months)	3 months
Working capital contingency ($C)	$1,134,137.75
Innovation fund for specialist services	$200,000.00

APPENDIX 3 – KEY ISSUE AREA DEFINITIONS[23]

Absolute homelessness: Homelessness refers to those who lack a regular, fixed, physical shelter. This (conservative) definition is known as absolute homelessness, according to the United Nations, and includes those who are living rough in a public or private place not ordinarily used as regular sleeping accommodation for a human being (e.g., outside, on the streets, in parks or on the beach, in doorways, in parked vehicles, squats, or parking garages), as well as those whose primary night-time residence is supervised public or private emergency accommodation (e.g., shelter, hostel). Specifically, being homeless is defined as currently having no fixed place to stay for more than seven nights and little likelihood of obtaining accommodation in the upcoming month or being discharged from an institution, prison, jail or hospital with no fixed address.

Precariously housed: This refers to people whose primary residence is a Single Room Occupancy (SRO), rooming house or hotel/motel. In addition, precariously housed individuals in the past year have had two or more episodes of being absolutely homeless, as defined above, in order to meet the criteria for inclusion.

Relatively homeless: This includes people whose regular housing fails to meet basic standards, such as: (1) living in overcrowded or hazardous conditions; (2) those at risk of homelessness, such as people who reside informally/non-permanently with friends or relatives (e.g., doubling-up, couch surfing); (3) those in transition (e.g., women, youth fleeing to transition houses/shelters from domestic abuse); (4) those who are temporarily without a dwelling (e.g., home lost for a relatively short period of time due to disasters such as a fire, or a change in economic or personal situation, such as marital separation or job loss); and, (5) those living in long-term institutions.

Stable housing: Stable housing is defined as living in one's own room, apartment, or house, or with family, with an expected duration of residence greater than or equal to six months and/or tenancy rights.

Serious mental disorders: Serious mental disorders are defined by diagnosis, duration, and disability using observations from referring sources, indicators of functional impairment, history of recent psychiatric treatment, and current presence of eligible diagnosis as identified by the Mini International Neuropsychiatric Interview (major depressive, manic or hypomanic episode, post-traumatic stress disorder, mood disorder with psychotic features, psychotic disorder).

High needs: A score on the Multnomah Community Ability Scale (MCAS) of 62 or lower (functioning indicator) AND a Mini International Neuropsychiatric Interview (MINI) diagnosis of current psychotic disorder or bipolar disorder (MINI disorders 18, 21 or 22 on the Eligibility Screening Questionnaire) or an observation of psychotic disorder on the screener (at least two of Q 6e10 in Section DI) on the Eligibility Screening Questionnaire (diagnostic indicator). AND one of:

- YES (or don't know or declined) to item 20 on Demographics, Service & Housing History questionnaire; that is, two or more hospitalizations for mental illness in any one year of the last five (service use indicator) OR Comorbid substance use (any of MINI disorders 23, 24, 25 or 26 on the Eligibility Screening Questionnaire) (substance use indicator) OR recent arrest or incarceration.

- YES (or don't know or declined) to item 22 on Demographics, Service & Housing History questionnaire (legal involvement indicator).

Moderate needs: All others who have met eligibility criteria but do not meet the high needs criteria above.

High users: Distinct from high needs users; defined as those who fell in the top 10% of service usage prior to intervention.

APPENDIX 4 – PUBLIC SECTOR USAGE DETAILS

The AHCS research team collected public sector usage data for the intervention and treatment as usual groups. The team also estimated the unit cost of the various categories of public sector usage. The table below shows these figures for the first 12 months of the intervention which were publicly released in the AHCS interim report.

	Unit Costs[24]		Incidence Annualized Means - Total Sample		Incidence Annualized Means - High Users	
			TAU	HF	TAU	HF
Health and justice use:						
ER visits	$270	- $424	2.9	2.2	3.8	3.4
Detention in police cells	$188	- $349	1.1	0.7	1.2	0.4
Outpatient consults	$87	- $96	2.6	1.5	3.0	1.9
Provider visits (non study)	$194	- $348	10.8	-	19.5	-
Overnight stays:						
Shelter	$23	- $118	70.5	29.3	29.3	19.3
Detox	$159	- $433	2.2	1.2	3.7	1.3
Inpatient–Acute psychiatric in general hospital	$513	- $746	4.6	4.7	21.7	11.9
Inpatient–Acute psychiatric ward in psych hospital	$628	- $847	5.5	3.5	35.5	16.3
Inpatient–Acute non-psychiatric	$892	- $1,205	2.6	2.0	0.1	4.0
Prison or jail	$142	- $181	14.6	14.6	6.1	7.6
Transitional housing	$28	- $50	10.5	5.4	8.1	1.9
Addiction treatment	$63	- $88	8.8	4.1	13.7	2.5

APPENDIX 5 – LIMITATIONS ON DATA AND ANALYSIS

All figures in this report are illustrative and simplified for the purposes of this feasibility study. Inputs into financial modelling heavily rely on the experience of AHCS. We realize that any individual HF SIB will require tailoring of the analysis to accommodate the uniqueness of each service provider program including program costs, historical performance records and organizational considerations.

The following are some limitations of this report:

Cohort intake: Practical considerations dictate a ramp-up period to reach the maximum caseload. For simplicity our modelling did not take into consideration the ramp-up period, and this would be a required detail in future HF SIB development projects.

High user cost: While intervention costs for high users are not expected to be dramatically higher than those of the remaining 90% of the target population, high user intervention costs were not explicitly tracked in the AHCS study. This study models a high user intervention cost that is reflective of the needs composition of the group and closer to that of ACT.

High user savings: High users public sector costs were determined by tracking public sector service usage over the three- to six-month period prior to baseline. It is not clear if the level of usage would have remained at the same level absent the Housing First intervention.

PROJECT TEAM AND CONTRIBUTORS

References

1. Figures in this paragraph are from: Homeless Hub, Centre for Addiction and Mental Health (CAMH), Mental Health Commission of Canada (MHCC)

2. Savings estimates based on data released by the Mental Health Commission of Canada on the AHCS pilot

3. Homeless Hub (2013) "The State of Homelessness in Canada"

4. Homeless Hub (2013) "The State of Homelessness in Canada"

5. MHCC (2011) "Turning the key – Assessing housing and related supports for persons living with mental health problems and illness"

6. CAMH (2014) Website - Statistics on mental illness and addictions

7. CAMH (2014) Website - Statistics on mental illness and addictions

8. MHCC (2013) "Making the case for investing in mental health in Canada"

9. Ibid.

10. Figure adapted from Employment and Social Development Canada: Homelessness Partnering Strategy

11. Source: Working Group members

12. Ibid

13. Adapted from MHCC (2013) "Follow-up Implementation and Fidelity Evaluation of the MHCC AHCS Project: Cross-Site Report." Not a perfect representation of the AHCS experience.

14. SIB Technical Guide, Social Finance UK

15. With the exception of a scenario where the service delivery contract includes performance incentives to the service provider; in such case, a smaller amount of financial risk is taken on by the service provider

16. MHCC (2012) "AHCS Interim Report"

17. With the exception of a scenario where the service delivery contract includes performance incentives to the service provider; in such case, a smaller amount of financial risk is taken on by the service provider

18. Outcome price calculation takes into consideration cost beyond those of direct service delivery (as per Appendix 2)

19. For all of our analysis in this report we assumed a base-case internal rate of return to investors (IRR) of 8% and for simplicity held it constant across different scenarios. 8% is in-line with global SIB precedents, but any Housing First SIB in Canada will be unique and a targeted return would be negotiated for each case.

20. For all of our analysis in this report we assumed a base-case internal rate of return to investors (IRR) of 8% and for simplicity held it constant across different scenarios. 8% is in-line with global SIB precedents, but any Housing First SIB in Canada will be unique and a targeted return would be negotiated for each case.

21. Note: IRR is calculated on a pre-tax basis. The legal structure of the SIB as well as the nature of the investors will influence the amount of taxes (if any) and therefore all our analysis are on a pre-tax basis

22. Inputs are in red; other figures are calculated

23. Definitions taken directly from MHCC (2014): AHCS Final Cross- Site Report

24. Range reflects the variance of these costs by city